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HONORS ACCOUNTING THESIS

by
Robert Loeb

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of
the requirements of the Sally McDonnell Barksdale Honors College.

Oxford

May 2019

Approved by

Advisor: Dr. Victoria Dickinson

Reader: Dean Mark Wilder

ABSTRACT

ROBERT LOEB: Honors Accounting Thesis

This thesis consists of nine case studies that involved analyzing the financial statements of both domestic and international companies. These analyses examined a number of accounting related issues and key management decisions regarding accounting policies. The cases required the consideration of management's responsibility to report accurately and completely the financial results of operations in regard to accounting policy decisions pertaining to financial statement presentation, bad debt expense recognition, and capital asset depreciation. In addition, the cases explored other current topics in accounting such as the convergence of U.S. Generally Accepted Accounting Principles with International Financial Reporting Standards and the implementation of Accounting Standards Update 606. Throughout all case studies, a focus was maintained on the effects of management's decision making regarding accounting policy on corporate reporting and disclosures.

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CASE 1: MOLSON COORS BREWING COMPANY

SUMMARY:

This case provided the 2013 financial statements of Molson Coors Brewing Company and asked several questions about the financial statements and the information in them. Questions ranged from general inquiries about the basic structure of financial statements to requests for detailed analyses of specific elements of Molson Coors' financial statements and the manner in which those elements were organized within the statements. Most questions pertained to Molson Coors' income statement and in particular to the company's profitability and earnings persistence.

In completing this case, I gained valuable insights into the classification and presentation of financial statements. I learned the value of providing relevant and useful classifications and individual line items within income statements. Furthermore, I observed the importance that notes to financial statements and the disclosure of supplementary schedules and calculations can have in one's ability to interpret and analyze financial statements.

A. What are the major classifications on an income statement?

The major classification of an income statement include an operating section, a nonoperation section, a section for income tax, a discontinued operations section, a noncontrolling interest section, and an earnings per share section. The operating section details the revenues and expenses pertaining to a company's principle operations. It commonly includes subsections for sales, cost of goods sold, selling expenses, and general and administrative expenses. The nonoperation section reports other revenues, expenses, gains, and losses stemming from a company's secondary or auxiliary activities. The income tax section reports the taxes related to income that a company pays. The discontinued operations section consists of gains or losses caused by the disposal of business components. The noncontrolling interest section reports the portion of income allocated to noncontrolling shareholders. Lastly, the earnings per share section lists a company's earnings or net loss per share of common stock for the period.

B. Explain why, under U.S. GAAP, companies are required to provide "classified" income statements.

Users of financial statements are usually interested in assessing the amounts, timing, and uncertainty of a company's future cash flows. Providing classifications within the income statement adds a level of detail that can greatly aid users in this process. For example, differentiating between recurring and nonrecurring revenues will greatly enhance users' abilities to assess the certainty of future cash flows. In this sense, individual components of the income statement often provide information that has value separate from the statement as a whole, making classification a beneficial aspect of reporting income.

C. In general, why might financial statement users be interested in a measure of persistent income?

Perhaps the most useful aspect of a financial statement is its potential to predict a company's future performance and to assess the uncertainty of its future earnings. Providing users with a separate measure of income streams that a company expects to persist into the future as opposed to income stemming from peripheral or nonrecurring activities allows users to make more accurate determinations regarding the predictability and uncertainty of future cash flows. This increases the usefulness of the financial statements and allows investors and creditors to more efficiently allocate resources.

D. Define comprehensive income and discuss how it differs from net income.

Comprehensive income is a measure of income that consists of all changes in stockholders' equity of an entity during a period arising from transactions and other events from nonowner sources. It is a broader measure of income than net income and is included in financial statements to disclose changes in fair value in select assets and liabilities deemed too volatile to be included in net income. Items commonly reported as other comprehensive income include unrealized holding gains/losses on available-for-sale securities, certain pension adjustments, certain foreign translation gains/losses, and some derivative transactions. The inclusion of comprehensive income as a separate measure facilitates the use of fair value accounting by allowing for the disclosure of material gains and losses related to changes in fair value without subjecting net income to the volatility of fair value measurements.

- E. The income statement reports “Sales” and “Net sales.” What is the difference? Why does Molson Coors report these two items separately?**

Gross sales or “sales” consists of the total of all sales transactions in a given period, while “net sales” reports a measure of sales adjusted to account for various common deductions to sales. Items typically deducted from gross sales to arrive at net sales include sales allowances, sales returns, and sales discounts. Molson Coors chooses to report sales and net sales separately in order to disclose the amount the company pays in excise taxes on the face of the income statement. Since excise taxes are typically a revenue tax instead of an income tax, Molson Coors subtracts the amount directly from sales to arrive at a net sales figure that is more indicative of the company’s actual revenue from sales.

- F. Consider the income statement item “Special items, net” and information in Notes 1 and 8. In general, what types of items does Molson Coors include in this line item? Explain why the company reports these on a separate line item rather than including them with another expense item. Molson Coors classifies these special items as operating expenses. Do you concur with this classification?**

Molson Coors includes in “special items, net” charges incurred or benefits realized that are not indicative of the company’s core operations. The company lists infrequent or unusual items, impairment or asset-abandonment related losses, restructuring charges and other atypical employee-related costs, and fees on termination of significant operating agreements and gain (losses) in disposal of investments as examples of special items. Molson Coors notes that while these items are not indicative of the company’s core operations, they are not necessarily nonrecurring. Essentially, it appears as though Molson Coors chooses to consolidate all of its operating expenses into either one of two categories. The first is listed as

“marketing, general, and administrative expenses.” This category includes most of the typical costs directly associated with the core operations of the company, such as marketing, human resources, information technology, and legal expenses. The company lists a second category called “special items, net” to disclose other unique or infrequent expenses and losses that are less directly related to the company’s operations as compared to those included in “marketing, general, and administrative expenses.” I concur with Molson Coors’ decision to include “special items, net” in the operating section of the income statement given most of the transactions comprising “special items, net” appear to be related to gains or losses on human resources and other assets required to operate the company or fees and losses incurred on agreements relating to operations. Furthermore, the items included in “special items, net” all appear to be significantly more related to operations than those items included in the company’s only other expense category related to continuing operations, “other income (expense), net.”

- G. Consider the income statement item “Other income (expense), net” and the information in Note 6. What is the distinction between “Other income (expense), net” which is classified a nonoperating expense, and “Special items, net” which Molson Coors classifies as operating expenses?**

The difference between “other income (expense), net” and “special items, net” lies in how closely Molson Coors believes the transactions comprising these categories relate to operations. Molson Coors includes in “special item, net” unique or infrequent losses and expenses related to human resources and other assets required to operate the company or fees and losses incurred on agreements relating to operations. Because these items all relate to operations, “special items, net” is listed as an operating expense. Meanwhile, Molson Coors includes in “other income (expense), net” gains and losses related to nonoperating assets, currency exchanges, and derivative transactions. Because these items do not directly relate to brewing

and selling beer, “other income (expense), net” is classified as a nonoperating expense.

- H. What is the amount of comprehensive income in 2013? How does this amount compare to net income in 2013? What accounts for the difference between net income and comprehensive income in 2013? In your own words, how are the items included in Molson Coors’ comprehensive income related?**

Molson Coors reports \$567.3 million in net income in 2013 attributable to the company. It reports \$760.2 million in comprehensive income in 2013 attributable to the company. The difference between net income and comprehensive income consists of fair value gains and losses in derivative instruments, foreign currencies, pensions, and other holdings. These items are all related in that they are gains and losses caused by fluctuations in fair value deemed too volatile to be included in net income.

- J. What is Molson Coors’ effective tax rate in 2013?**

Molson Coors’ effective tax rate was 12.8 percent in 2013. Income tax expense was reported at \$84 million. Income before tax was reported at \$654.5 million. Molson Coors’ effective tax rate was lower than the statutory rate of 35 percent primarily due to the lower effective income tax rates applicable to the company’s foreign operations. In particular, the company’s decrease in income tax expense in 2013 was primarily driven by release of valuation allowances in Canada and decreases in deferred tax liabilities related to the impairment of certain intangible assets.

CASE 2: PEARSON PLC

SUMMARY:

This case provided the 2009 financial statements of Pearson PLC and asked several questions about the financial statements and the information found in them. The questions generally revolved around Pearson's practice of making sales on credit and the accounting procedures related to that practice. In particular, the case examined the use of estimations in accounting for bad debts and sales returns and how those estimates relate to the balance sheet and the income statement and to other accounts like trade receivables.

In completing this case, I gained a better understanding of the accounting policies needed to facilitate the practice of extending credit in business operations. This case forced me to consider the challenges associated with the extension of credit to customers and the ways in which managers may try to combat those challenges. Furthermore, I learned of the effects those challenges can have on a company's financial statements and particularly the effects on key line items such as sales revenue and expenses.

I. What is an account receivable? What other names does this asset go by?

An account receivable is a balance sheet account that indicates the amount or amounts an entity has a right to collect because it has sold goods or provided services, but has not yet been compensated. It serves as an extension of credit, typically on a short-term basis, granted to customers with the idea of simplifying the payment process. For example, allowing customers to pay on account can be effective for customers who make frequent transaction or when customers are unlikely to pay until after services have been rendered. An account receivable is a type of trade receivable and could be seen as another name for such.

J. How do accounts receivable differ from notes receivable?

An account receivable is different from a note receivable in that there is no written agreement to pay the amount owed. A note receivable is typically a written contract that specifies a future date on which the amount owed will be paid and may carry interest. An account receivable is more of an open line of credit with no written due date, although the expectation is generally that accounts receivable will be settled within 30 to 60 days.

K. What is a contra account? What two contra accounts are associated with Pearson's trade receivables (see Note 22)? What types of activities are captured in each of these contra accounts? Describe factors that managers might consider when deciding how to estimate the balance in each of these contra accounts.

A contra account is a general ledger account that is created in relation to another account with the purpose of carrying a normal balance opposite that of the related account. The contra account is then used to offset the balance in its related account. The two contra accounts associated with Pearson's trade receivables are provision for bad and doubtful debts and provision for sales returns. (Note: In the United States, the term "allowance" is typically used in place of provision.) The provision for bad and doubtful debts account captures activities such as the estimation of bad debts expense and the writing off of individual accounts. The provision for sales returns account captures activities such as the estimation of sales returns and the actual return of goods. In estimating the provision for bad and doubtful debts account a manager would probably consider first the age and amount of the account outstanding and then possibly other information about the individual customer such as credit score and past account activity if available. In estimating the provision for sales returns a manager would probably consider past years' sales returns, the seasonality of products sold and services rendered, and the quality of product being sold.

- L. Two commonly used approaches for estimating uncollectible accounts receivable are the percentage- of-sales procedure and the aging-of-accounts procedure. Briefly describe these two approaches. What information do managers need to determine the activity and final account balance under each approach? Which of the two approaches do you think results in a more accurate estimate of net accounts receivable?**

The percentage-of-sales approach uses a percentage of either all sales or a percentage of all credit sales to estimate uncollectable accounts. The aging-of-accounts procedure involves sorting accounts into categories based on age and then estimating the uncollectable accounts using a percentage of each individual category. Under both procedures, a manager would need to know the balance of

accounts receivable. Under the aging-of-accounts method, a manager also would need to know the age of each individual account. I would think the aging-of-accounts procedure would be more accurate as the age of an outstanding account would likely be a great indicator of its likelihood to be paid.

- M. If Pearson anticipates that some accounts will be uncollectible, why did the company extend credit to those customers in the first place? Discuss the risks that managers must consider with respect to accounts receivable.**

In theory, if a manager refused to extend any credit whatsoever it would likely be very difficult to make any sales, especially for more expensive products. By extending credit, managers hope to increase sales enough to offset any expense occurred through the issuance of bad debts. The obvious risk managers must consider is the risk that enough customers will not pay their accounts or that the process of collecting on accounts will be so costly that the extension of credit will prove unprofitable for the company.

- N. Note 22 reports the balance in Pearson's provision for bad and doubtful debts (for trade receivables) and reports the account activity ("movements") during the year ended December 31, 2009. Note that Pearson refers to the trade receivables contra account as a "provision." Under U.S. GAAP, the receivables contra account is typically referred to as an "allowance" while the term provision is used to describe the current-period income statement charge for uncollectible accounts (also known as bad debt expense).**

- i. Use the information in Note 22 to complete a T-account that shows the activity in the provision for bad and doubtful debts account during the year. Explain, in your own words, the line items that reconcile the change in account during 2009.

Provision for Bad and Doubtful Debts (in £ millions)

	72
20	26
	<u>76</u>

In 2009, Pearson estimated bad debts expense of £26 million, as described by the “income statement movements” line item. In addition, Pearson wrote-off £20 million of accounts receivable, as evidenced by the “utilized” line item.

- ii. Prepare the journal entries that Pearson recorded during 2009 to capture 1) bad and doubtful debts expense for 2009 (that is, the “income statement movements”) and 2) the write-off of accounts receivable (that is, the amount “utilised”) during 2009. For each account in your journal entries, note whether the account is a balance sheet or income statement account.

To capture bad and doubtful debts expense: Debit “bad debts expense” (income statement) £26 million and credit “provision for bad and doubtful debts” (balance sheet) £26 million. To capture the write-off of accounts receivable: Debit “provision for bad and doubtful debts” (balance

sheet) £20 million and credit “trade receivables” (balance sheet) £20 million.

- iii. **Where in the income statement is the provision for bad and doubtful debts expense included?**

Bad debts expense appears on the income statement as an operating expense because it is an expense occurred in the collection of income from making sales or rendering services through normal business operations.

- O. **Note 22 reports that the balance in Pearson’s provision for sales returns was £372 at December 31, 2008 and £354 at December 31, 2009. Under U.S. GAAP, this contra account is typically referred to as an “allowance” and reflects the company’s anticipated sales returns.**

- i. **Complete a T-account that shows the activity in the provision for sales returns account during the year. Assume that Pearson estimated that returns relating to 2009 Sales to be £425 million. In reconciling the change in the account, two types of journal entries are required, one to record the estimated sales returns for the period and one to record the amount of actual book returns.**

Provision for Sales Returns (in £ millions)

	372
443	425
	<u>354</u>

- ii. Prepare the journal entries that Pearson recorded during 2009 to capture, 1) the 2009 estimated sales returns and 2) the amount of actual book returns during 2009. In your answer, note whether each account in the journal entries is a balance sheet or income statement account.**

To capture 2009 estimated sales returns: Debit “sales returns” (income statement) £425 million and credit “provision for sales returns” (balance sheet) £425 million. To capture the amount of actual book returns during 2009: Debit “provision for sales returns” (balance sheet) £443 million and credit “trade receivables” (balance sheet) £443 million.

- iii. In which income statement line item does the amount of 2009 estimated sales returns appear?**

The amount of 2009 estimated sales returns appears on the income statement as a reduction to sales revenue.

- P. Create a T-account for total or *gross* trade receivables (that is, trade receivables before deducting the provision for bad and doubtful debts and the provision for sales returns). Analyze the change in this T-account between December 31, 2008 and 2009. (*Hint: your solution to parts f and g will be useful here*). Assume that all sales in 2009 were on account. That is, they are all “credit sales.” You may also assume that there were no changes to the account due to business combinations or foreign exchange rate changes. Prepare the journal entries to record the sales on account and accounts receivable collection activity in this account during the year.

Trade Receivables (in £ millions)

1,030	
5,624	5,202
	20
	443
<u>989</u>	

To record sales on account: Debit “trade receivables” £5,624 million and credit “sales” £5,624 million. To record accounts receivable collection activity: Debit “cash” £5,202 million and credit “trade receivables” £5,202 million.

CASE 3: PALFINGER AG

SUMMARY:

This case provided the 2007 financial statements of Palfinger AG and asked several questions about the financial statements and the information found in them. The questions pertained to Palfinger's accounting policies regarding the company's property, plant, and equipment. In particular, the case examined issues such as the proper accounting for property, plant, and equipment under construction, improvements to property, plant, and equipment, and depreciation of property, plant, and equipment.

In completing this case, I gained a better understanding of accounting issues related to property, plant, and equipment. This case forced me to consider the challenges associated with properly allocating aspects such as government subsidies, capital improvements, and depreciation of plant, property, and equipment. Furthermore, I learned of the effects those challenges can have on a company's financial statements and the difficulties managers face in trying to apply the correct accounting principles to those types of issues.

- Q. Based on the description of Palfinger above, what sort of property and equipment do you think the company has?**

Based on the company's description it would seem logical for the company to have factories and heavy machinery to produce its goods. The company would likely also have warehouses to store raw materials and finished products. The company would also likely own buildings to house corporate and selling activities. In addition, the company likely owns at least some land upon which these facilities exist.

- R. The 2007 balance sheet shows property, plant, and equipment of €149,990. What does this number represent?**

This figure represents the historical cost of the company's property, plant, and equipment less any depreciation associated with those items. Property, plant, and equipment are valued on the basis of historical cost. This cost represents the price of acquiring the asset and preparing it for its intended use. The assets are then depreciated over their useful lives. The historical cost of property, plant, and equipment less its accumulated depreciation is often referred to as the book value of the asset. In this case, the figure provided on Palfinger's balance sheet represents the book value of the company's plant, property, and equipment.

- S. What types of equipment does Palfinger report in notes to the financial statements?**

In the notes to financial statement, the company divides equipment between “plant and machinery” and “other plant, fixtures, fittings, and equipment.”

- T. In the notes, Palfinger reports “Prepayments and assets under construction.” What does this sub- account represent? Why does this account have no accumulated depreciation? Explain the reclassification of €14,958 in this account during 2007.**

This subaccount represents payments made in anticipation of the purchase or contraction of new property, plant, and equipment and the cost of assets being constructed but not yet in use. This account has no depreciation because the assets it represents are not yet in use. Once the assets are put into use, they will be depreciated on a straight-line basis in accordance with the company’s depreciation policy. The €14,958 represents the cost of assets under construction that were finished and put into use during the period and subsequently transferred to the appropriate subaccount.

- U. How does Palfinger depreciate its property and equipment? Does this policy seem reasonable? Explain the trade-offs management makes in choosing a depreciation policy.**

Palfinger depreciates its assets using the straight-line method. This method would seem reasonable assuming the company gets a similar amount of use out of its assets in each period of the asset’s useful life. One trade-off management would have to consider would be the potential tax benefits of using an accelerated depreciation method such as double-declining balance. This method would allow management to depreciate its property, plant, and equipment at twice the current rate, decreasing net income and therefore income taxes. Another alternative would

be to base the useful life of the company's property, plant, and equipment on units of production as opposed to years. This could provide a more realistic estimate of the company's depreciation expense in a given period, as it would be based on the asset's usage. However, it could be more difficult for the company's managers to make an estimation of useful life in units than years.

V. Palfinger routinely opts to perform major renovations and value-enhancing modifications to equipment and buildings rather than buy new assets. How does Palfinger treat these expenditures? What is the alternative accounting treatment?

Palfinger capitalizes and then depreciates these activities over either the new or the original useful life of the asset. The alternative would be to debit the improvements to the accumulated depreciation account associated with the asset being improved. This method would make sense conceptually if the improvement did not actually improve the quality of the asset but rather just extended its useful life by some amount of time.

W. Use the information in the financial statement notes to analyze the activity in the "Property, plant and equipment" and "Accumulated depreciation and impairment" accounts for 2007. Determine the following amounts:

a. The purchase of new property, plant and equipment in fiscal 2007.

Property, plant, and equipment consists of the additions to land and buildings, plant and machinery, and other plant, fixtures, fittings, and equipment, which total €38,718,000

- b. Government grants for purchases of new property, plant and equipment in 2007. Explain what these grants are and why they are deducted from the property, plant, and equipment account.**

This amount is €733,000. It represents government assistance in the purchase of property, plant, and equipment and is shown as a deduction in accordance with IAS 20, which requires government grants to be treated as deferred income or deducted from the carrying value of the asset. The deduction to book value is required so that the book value of the property, plant, and equipment is represented at the historical cost of the assets the company's surrendered to acquire the property, plant, and equipment.

- c. Depreciation expense for fiscal 2007.**

Palfinger lists its depreciation expense for 2007 as €12,557,000.

- d. The net book value of property, plant, and equipment that Palfinger disposed of in fiscal 2007.**

The net book value of property, plant, and equipment is the difference between the acquisition cost of the disposals (€13,799,000) and the accumulated depreciation on the disposals (€12,298,000) which is €1,501,000.

- X. The statement of cash flows (not presented) reports that Palfinger received proceeds on the sale of property, plant, and equipment amounting to €1,655 in fiscal 2007. Calculate the gain or loss that Palfinger incurred on this transaction. Hint: use the net book value you calculated in part g iv, above. Explain what this gain or loss represents in economic terms.**

The gain or loss on sale of plant, property, and equipment is equal to the cash received on sale (€1,655,00) and the net book value of the plant, property, and equipment sold (€1,501,000) which yields a gain of €144,000.

Y. Consider the €10,673 added to “Other plant, fixtures, fittings, and equipment” during fiscal 2007. Assume that these net assets have an expected useful life of five years and a salvage value of €1,273. Prepare a table showing the depreciation expense and net book value of this equipment over its expected life assuming that Palfinger recorded a full year of depreciation in 2007 and the company uses:

a. Straight-line depreciation

	Depreciation Expense	Net Book Value
2007	\$1,880	\$8,793
2008	1880	6913
2009	1880	5033
2010	1880	3153
2011	1880	1273

*in € thousands

**net book value shown at end of year

b. Double-declining-balance depreciation

	Depreciation Expense	Net Book Value
2007	\$4,269.20	\$6,403.80
2008	2,561.52	3,842.28
2009	1,536.91	2,305.37
2010	922.14	1,383.23
2011	110.23	1,273.00

*in € thousands

**net book value shown at end of year

- Z. Assume that the equipment from part *i.* was sold on the first day of fiscal 2008 for proceeds of €7,500. Assume that Palfinger's accounting policy is to take no depreciation in the year of sale.**

- a. Calculate any gain or loss on this transaction assuming that the company used straight-line depreciation. What is the total income statement impact of the equipment for the two years that Palfinger owned it? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part *i. i.*).**

The gain or loss on the transaction is equal to the proceeds of the sale (€7,500,000) minus the net book value of the equipment (€8,793,000) which yields a loss of €293,000. The income statements effects of this equipment would be the depreciation expense of €1,880,000 reported in 2007 and the loss on sale of €293,000 reported in 2008.

- b. Calculate any gain or loss on this transaction assuming the company used double-declining- balance depreciation. What is the total income statement impact of this equipment for the two years that Palfinger owned them? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part *i. ii.*).**

The gain or loss on the transaction is equal to the proceeds of the sale (€7,500,000) minus the net book value of the equipment (€6,403,800) which yields a gain of €1,096,200. The income statements effects of this equipment would be the depreciation expense of €4,269,200 reported in 2007 and the gain on sale of €1,096,200 reported in 2008.

- c. Compare the total two-year income statement impact of the equipment under the two depreciation policies. Comment on the difference.**

Under the straight-line method the net effect of the equipment on net income over the two-year period is a decrease of €2,173,000. Under the double-declining balance method the net effect of the equipment on net income over the two-year period is a decrease of €3,173,000. This difference illustrates the potential cash flow benefit of an accelerated depreciation method. Under this method depreciation expenses are increased, but income taxes are lowered due to the lower net income. This results in a net increase in cash flow since depreciation is a noncash expense. The difference also emphasizes the major drawback of using an accelerated depreciation method, which is lower net income.

CASE 4: VOLVO GROUP

SUMMARY:

This case provided the 2009 financial statements of Volvo Group and asked several questions about the financial statements and the information found in them. The questions pertained to Volvo's accounting policies regarding the company's research and development expenses. In particular, the case examined issues such as when to capitalize R&D expenditures as intangible assets, how to appropriately amortize these assets, and the differences in U.S. GAAP and IFRS reporting standards in regard to R&D expenses.

In completing this case, I gained a better understanding of the complex accounting issues related to research and development costs. This case forced me to consider the difficulty associated with properly allocating R&D expenses to the appropriate period. The case allowed me to explore the idea of capitalizing some R&D expenses and to consider the challenges of making this determination. Furthermore, I learned of the effects those challenges can have on a company's financial statements and the difficulties managers face in trying to apply the correct accounting principles to these types of R&D issues.

AA. The 2009 income statement shows research and development expenses of SEK 13,193 (millions of Swedish Krona). What types of costs are likely included in these amounts?

The costs included in these amounts are likely activities aimed at obtaining new knowledge and developing new products that are not capitalized as intangible assets. This would include all cost relating research and some costs relating to development. Research costs consist of the search, evaluation and final selection of applications of research findings or other knowledge. Other research costs would be the search for alternatives for materials, products, processes, systems or services and the formulation, design, evaluation and final selection of possible alternatives for new or improved materials, products, processes, systems or services. Examples of development costs would be the design, construction and testing of pre-production or pre-use prototypes, models, and testing of a chosen alternatives for new or improved materials, devices, products, processes, systems or services.

BB. Volvo Group follows IAS 38—*Intangible Assets*, to account for its research and development expenditures (see IAS 38 excerpts at the end of this case). As such, the company capitalizes certain R&D costs and expenses others. What factors does Volvo Group consider as it decides which R&D costs to capitalize and which to expense?

Research and development expenditures are capitalized if there is a high degree of certainty that those expenditures will result in future financial benefits for the company. For this to happen, it must be possible to prove the technical functionality of a new product or software prior to its development being reported as an asset. In practice, this means only the development phase of R&D is

capitalized. All other costs are expensed against income as incurred. Furthermore, costs incurred during the development may be capitalized only if the costs demonstrate all of the following criteria: the technical feasibility of completing the intangible asset so that it will be available for use or sale, the intention to complete the intangible asset and use or sell it, the ability to use or sell the intangible asset, the ability of the intangible asset to generate probable future economic benefits, the existence of a market for the output of the intangible asset, the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset, and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

CC. The R&D costs that Volvo Group capitalizes each period (labeled Product and software development costs) are amortized in subsequent periods, similar to other capital assets such as property and equipment. Notes to Volvo's financial statements disclose that capitalized product and software development costs are amortized over three to eight years. What factors would the company consider in determining the amortization period for particular costs?

In determining the period of time over which to amortize these costs, the company likely attempts to estimate the amount of time over which the cost will provide value to the company. This would entail projecting the future economic benefits the company expects to receive from the expenditures and then placing those benefits on a time line with special consideration given to economic factors such as inadequacy, supersession, and obsolescence.

DD. Under U.S. GAAP, companies must expense all R&D costs. In your opinion, which accounting principle (IFRS or U.S. GAAP) provides financial statements that better reflect costs and benefits of periodic R&D spending?

I think that the U.S. GAAP provides a more accurate representation of R&D expenses. I believe any principle that involves determining which portions of R&D spending should be capitalized and which should be expensed would have to be highly subjective and subject to possible manipulation. It is just extremely difficult to accurately match R&D expenses against their revenues given the uncertainty that those revenues will ever arise. For this reason, I think the U.S. GAAP principle of expensing all R&D costs in the period incurred provides for the most consistent, comparable, and best accounting practice.

EE. Refer to footnote 14 where Volvo reports an intangible asset for “Product and software development.” Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.

a. What is the amount of the capitalized product and software development costs, net of accumulated amortization at the end of fiscal 2009? Which line item on Volvo Group’s balance sheet reports this intangible asset?

This amount is SEK 11,409 and is represented by the “intangible assets” line on the balance sheet.

b. Create a T-account for the intangible asset “Product and software development,” net of accumulated amortization. Enter the opening and ending balances for fiscal 2009. Show entries in the T-account that record the 2009 capitalization (capital expenditures) and amortization. To

simplify the analysis, group all other account activity during the year and report the net impact as one entry in the T-account.

Product and software development
(in SEK millions)

12,381	
2602	2830
	448
11409	

FF. Refer to Volvo's balance sheet, footnotes, and the eleven-year summary. Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.

a. Complete the table below for Volvo's Product and software development intangible asset.

(in SEK millions)	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	2,602
2) Total R&D expense on the income statement	11,059	14,348	13,139
3) Amortization of previously capitalized costs (included in R&D expense)	2,357	2,864	2,830
4) Total R&D costs incurred during the year	10,759	13,634	12,911

III. What proportion of Total R&D costs incurred did Volvo Group capitalize (as product and software development intangible asset) in each of the three years?

It capitalized 19.12% in 2007, 15.77% in 2008, and 20.15% in 2009.

GG. Assume that you work as a financial analyst for Volvo Group and would like to compare Volvo's research and development expenditures to a U.S. competitor, Navistar International Corporation. Navistar follows U.S. GAAP that requires that all research and development costs be expensed in the year they are incurred. You gather the following information for Navistar for fiscal year end October 31, 2007 through 2009.

a. Use the information from Volvo's eleven-year summary to complete the following table:

(in SEK millions)	2007	2008	2009
Net sales, industrial operations	276,975	294,932	208,487
Total assets, from balance sheet	321,647	372,415	332,265

b. Calculate the proportion of total research and development costs incurred to net sales from operations (called, net sales from

manufactured products, for Navistar) for both firms. How does the proportion compare between the two companies?

	2007	2008	2009
Navistar	3.15%	2.67%	3.83%
Volvo	3.88%	4.62%	6.19%

Despite the difference in accounting principle, the proportion is about the same for the two companies aside from a dip in Volvo's 2009 sales.

CASE 5: APPLE INC.

SUMMARY:

This case provided the 2010 financial statements of Apple, Inc. and asked several questions about the financial statements and the information found in them. Apple is a consumer electronics company and many of the questions revolved around the company's accounting practices related to revenue recognition. In particular, the case examined the steps Apple takes in determining when to recognize revenue and comparing those steps to the new FASB standards for recognizing revenue presented in ASC 606.

In completing this case, I gained a better understanding of the accounting principles related to revenue recognition. This case forced me to consider the potential issues in regard to both the timing and amount of revenue to be recognized, and the effect that this recognition has on a company's income statement and balance sheet. The case required consulting the FASB Accounting Standards Codification, which gave me the chance to gain a better understanding of the FASB's intentions with regard to its new revenue recognition standards. In addition, the case gave me an insight into the challenges managers face when determining when to recognize revenue and the many temptations managers must deal with in making these decisions. Overall, I felt this case furthered my ability to analyze a company's financial statements and notes in terms of understanding its revenue recognition principles.

HH. In your own words, define “revenues.” Explain how revenues are different from “gains.”

Revenue is a source of income derived from the company’s main operations, such as selling inventory or providing a service. A gain is source of income that comes from other secondary types of operations, such as selling an old piece of equipment.

II. Describe what it means for a business to “recognize” revenues. What specific accounts and financial statements are affected by the process of revenue recognition? Describe the revenue recognition criteria outline in the FASB’s Statement of Concepts No. 5.

A business recognizes revenue when it has satisfied its performance obligation as specified in its contract with the customer and subsequently records a credit to a revenue account on the company’s books. The journal entry to recognize revenue will debit an asset account, depending on what exactly the business receives for the sale, and credit an equity account for the amount of the sale. This entry affects the balance sheet by increasing assets and stockholder’s equity, the income statement by increasing sales, the statement of cash flows if cash was collected at the time the revenue was recognized, and the statement of stockholder’s equity when the revenue account is closed to retained earnings. The steps towards recognizing revenue under the new standard ASC 606 are identify the contract with the customer, identify the performance obligation(s) in the contract, determine the transaction price, allocate the price to the performance obligation(s), and recognize revenue as each performance obligation is met.

- JJ. Refer to the Revenue Recognition discussion in Note 1. In general, when does Apple recognize revenue? Explain Apple's four revenue recognition criteria. Do they appear to be aligned with the revenue recognition criteria you described in part b, above?**

Apple recognizes revenue when "persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collection is probable." These four criteria align well with the five steps of revenue recognition outlined in ASC 606. The only difference is the omission of a step specifying how Apple allocates sales price to multiple performance obligations; however, the company has a separate section in its financial statement notes title "Revenue Recognition for Arrangements with Multiple Deliverables" that directly addresses this issue.

- KK. What are multiple-element contracts and why do they pose revenue recognition problems for companies?**

Multiple element contracts are contracts that contain more than one performance obligation that must be satisfied. The difficulty with these contracts lies in allocating the transaction price to the separate performance obligations. Apple notes in its financial statements that many of its sales include hardware, software, and other non-software based services. Apple follows a relatively simple method of allocating sales price to the separate performance obligations based on their relative stand-alone prices. However, the company must use a complex hierarchy to determine a fair stand-alone price for many of its services.

LL. In general, what incentives do managers have to make self-serving revenue recognition choices?

There are many incentives that may cause a manager to make self-serving revenue recognition choices. A sales manager may feel pressure to recognize sales too early in order to meet criteria for a bonus or raise. A manager who is compensated in stock options may wish to increase revenue in a given period to meet or exceed earnings expectations in order to protect the value of his or her options. A manager may recognize revenue for the purpose of improving a company's financial statements in an effort to obtain access to cheaper capital. Some managers may even feel the need to make self-serving revenue recognition choices just to preserve their job security.

MM. Refer to Apple's revenue recognition footnote. In particular, when does the company recognize revenue for the following types of sales?

a. iTunes songs sold online.

Apple should recognize revenue on the sale of an iTunes song when the company meets its performance obligation of transferring the song to the purchaser's device. Furthermore, if Apple recognizes the revenue from the sale of an iTunes song at its gross amount, the company should also recognize the liability it has to pay the artist and record label its portion of the sale.

- b. Mac-branded accessories such as headphones, power adaptors, and backpacks sold in the Apple stores. What if the accessories are sold online?**

Revenue from the sale of accessories should be recognized when the purchaser assumes ownership of the product. For online sales, the revenue should be recognized when ownership of the product has shifted either to the shipper or has been delivered to the customer, depending on the terms of the shipping agreement.

- c. iPods sold to a third-party reseller in India.**

Apple should recognize revenue from this type of sale when the iPod is delivered to the customer in India, assuming Apple retains at least a portion of the risk of loss during transit.

- d. Revenue from gift cards**

Apple should recognize revenue from gift cards when the customer redeems the card. Only after the card has been redeemed does the customer have access to the benefits of its ownership, effectively satisfying Apple's performance obligation.

CASE 6: MERCK & CO., INC.

SUMMARY:

This case provided the 2007 financial statements of Merck & Co, Inc. and asked several questions about the financial statements and the information found in them. The questions generally revolved around the stockholders' equity section of Merck's balance sheet. In particular, the case examined how Merck discloses information relating to its common stock, dividends, and treasury stock. The case required the use of multiple financial statements, including the balance sheet, the statement of cash flows, and the statement of stockholders' equity, in order to draw conclusions about the company's practices regarding stockholders' equity. The case then asked for an examination of the way in which these aspects affect certain financial performance metrics.

In completing this case, I gained a better understanding of the accounting procedures relating to stockholder's equity. This case forced me to consider some of the difficult decisions managers must make in determining whether to retain a company's earnings, return some of those earnings to the stockholders as a dividend, or allocate those earnings to the purchase of treasury stock. In addition, the case allowed me to explore the accounting implications of these types of decisions. Furthermore, I learned of the effects those decisions can have on a company's financial statements and particularly the effects on key financial metrics and ratios. Overall, I think I gained a better understanding of the importance of an accurate and complete disclosure of information relating to a company's stockholders' equity

NN. Consider Merck's common shares.

- a. How many common shares is Merck authorized to issue?**

Merck is authorized to issue 5,400,000,000 shares.

- b. How many common shares has Merck actually issued at December 31, 2007?**

Merck has issued 2,983,508,675 shares.

- c. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet.**

The dollar value is equal to the number of shares issued (2,983,508,675) multiplied by the par value of each share (\$0.01).

- d. How many common shares are held in treasury at December 31, 2007?**

There are 811,005,791 shares held in treasury.

- e. How many common shares are outstanding at December 31, 2007?**

The number of shares outstanding is 2,172,502,884. This is equal to the number of shares issued less the number of shares held in treasury stock.

- f. At December 31, 2007, Merck's stock price closed at \$57.61 per share. Calculate the total market capitalization of Merck on that day.**

Merck's total market capitalization would be \$17.19 billion. This is calculated by multiplying the number of shares issued by the market price per share.

C. Why do companies pay dividends on their common or ordinary shares? What normally happens to a company's share price when dividends are paid?

Companies pay dividends in order to attract investors. Many investors seek the steady source of income that dividends provide, and this makes a stock of a company that pays dividends more attractive. Paying dividends also indicates that a company is having financial success, and furthermore that management anticipates future success. The rationale is that if management had concerns about the company's ability to meet future financial obligations then it would retain all of its earnings as opposed to distributing a portion of those earnings to its shareholders. For this reason, when a company declares a dividend, its stock price increases as investors buy the stock in order to receive the dividend. After the dividend is paid, the stock price usually goes back down as investors are now unwilling to pay a higher price since the dividend has already been paid. Generally, this increase and decrease in stock price is equal to the total dividend being paid. However, if the declaration of the dividend inspires optimism in investors about the future of the company, the increase in stock price may be greater than the following decrease, resulting in a net increase.

D. In general, why do companies repurchase their own shares?

A company may choose to repurchase its own shares for a number of reasons. For one, repurchasing shares can make the company look better in certain performance metrics, such as earnings per share, because the repurchase of shares lowers the number of shares outstanding. Second, repurchasing shares can reduce

the company's cost of equity, as the company does not have to pay dividends on repurchased shares. Other reasons may include management wanting to increase its relative ownership stake or thinking the stock may be undervalued.

- E. Consider Merck's statement of cash flow and statement of retained earnings. Prepare a single journal entry that summarizes Merck's common dividend activity for 2007.**

Retained Earnings	3310.7	
Cash		3307.7
Dividends Payable		3.4

- G. During 2007, Merck repurchased a number of its own common shares on the open market.**

- iv. Describe the method Merck uses to account for its treasury stock transactions.**

Merck reports treasury stock as a reduction from stockholder's equity. The purchase of treasury stock represents the use of assets to repurchase outstanding equity and should therefore reduce total stockholder's equity.

- v. Refer to note 11 to Merck's financial statements. How many shares did Merck repurchase on the open market during 2007?**

Merck repurchased 26.5 shares during 2007.

- vi. **How much did Merck pay, in total and per share, on average, to buy back its stock during 2007? What type of cash flow does this represent?**

Merck paid \$1429.7 in total and \$53.95 per share on stock repurchases during 2007. This represents a cash outflow from financing activities.

- vii. **Why doesn't Merck disclose its treasury stock as an asset?**

Treasury stock is not an asset because a company cannot theoretically hold an investment in itself. Instead, treasury stock represents an ownership claim in the company. Since the company is claiming ownership in itself, treasury stock represents a reduction in the outstanding equity of the company and is disclosed as a contra-equity account.

- I. **Determine the missing amounts and calculate the ratios in the tables below. For comparability, use dividends paid for both companies rather than dividends declared. Use the number of shares outstanding at year end for per-share calculations. What differences do you observe in Merck's dividend-related ratios across the two years? What differences do you observe in the two companies' dividend-related ratios?**

<i>(In millions)</i>	2007	2006
Dividends paid	\$3,307.3	\$3,322.6
Shares outstanding	2,172,502,884	2,167,785,445

Net income	\$3,275.4	\$4,433.8
Total assets	\$48,350.7	\$44,569.8
Operating cash flows	\$6,999.2	\$6,765.2
Year-end stock price	\$57.61	\$41.94
Dividends per share	\$1.52	\$1.53
Dividend yield	2.64%	3.65%
Dividend payout	100.97%	74.94%
Dividends to total assets	6.84%	7.45%
Dividends to operating cash flows	47.25%	49.11%

CASE 7: RITE AID CORPORATION

SUMMARY:

This case provided the 2010 financial statements of Rite Aid Corporation and asked several questions about the financial statements and the information found in them. The questions generally revolved around Rite Aid's outstanding debt and the accounting procedures related to that debt. In particular, the case examined the accounting for issuing long-term debt, recording the payment of interest, amortizing any premium or discount on the debt, and finally retiring the debt.

In completing this case, I gained a better understanding of the accounting procedures related to long-term debt. This case forced me to consider the challenges associated with issuing debt in an ever-changing financial market. The case also allowed me to consider the features of debt that affect its attractiveness to lenders. Furthermore, I learned of the effects those features can have on its accounting policies and its financial statements.

OO. Consider the various types of debt described in note 11, Indebtedness and Credit Agreement.

- a. Explain the difference between Rite Aid's secured and unsecured debt. Why does Rite Aid distinguish between these two types of debt?**

The difference between secured and unsecured debt is that secured debt is backed by some asset, such as land or a building. The terms of the debt allow the lender to seize the secured asset if the borrower defaults. Rite Aid distinguishes between its secured and unsecured debt in its financial statements because such disclosure is required by GAAP. The specific terms and conditions of a debt agreement can be very useful to investors and creditors and are therefore required to be disclosed in the financial statements.

- b. What does it mean for debt to be "guaranteed"? According to note 11, who has provided the guarantee for some of Rite Aid's unsecured debt?**

Debt is guaranteed when another party promises to pay the debt if the borrower defaults. Some of Rite Aid's unsecured debt is guaranteed by its wholly-owned subsidiaries. Because Rite Aid is a holding company with no direct operations, it is dependent upon its subsidiaries to provide cash flows to service the payment of debt and uses those subsidiaries to guarantee some debt.

c. What is meant by the terms “senior,” “fixed-rate,” and “convertible”?

Senior debt refers to debt that must be repaid first in the event of a liquidation. This distinction serves as a protection for lenders in the event the company takes on more debt than it can repay. Fixed-rate debt is debt that has a single, fixed interest rate as opposed to variable-rate debt in which the interest rate can change over time. Convertible debt is debt that can be converted to a predetermined amount of equity at specific times of the debt’s life, usually at the discretion of the debt holder. Offering a debt with convertible options often makes the debt more attractive to lenders.

d. Speculate as to why Rite Aid has many different types of debt with a range of interest rates.

Over time, Rite Aid has probably offered a range of different types of debt in order to appeal to as broad an audience of lenders as possible. Because interest rates and market conditions fluctuate over time, the features and interest rate of debt desired by lenders changes. By offering a variety of different types of debt, Rite Aid can respond to these changes and increase the number of lenders that will be willing to offer financing options to the company.

PP. Consider note 11, Indebtedness and Credit Agreement. How much total debt does Rite Aid have at February 27, 2010? How much of this is due within the coming fiscal year? Reconcile the total debt reported in note 11 with what Rite Aid reports on its balance sheet.

At February 27, 2010, Rite Aid has \$6,370,899 in total debt. Of this total debt, \$51,502 is due in the coming fiscal year. The total debt in note 11 can be reconciled with the balance by adding the “Current maturities of long-term debt and lease financing obligations,” the “Long-term debt, less current maturities,” and the “Lease financing obligations, less current maturities” line items on the balance sheet.

QQ. Consider the 7.5% senior secured notes due March 2017.

- a. What is the face value (i.e. the principal) of these notes? How do you know?**

The face value is \$500,000. This is because the carrying value of the note is listed as \$500,000, and there is no unamortized premium or discount listed.

- b. Prepare the journal entry that Rite Aid must have made when these notes were issued.**

Cash	500,000	
	Notes payable	500,000

- c. Prepare the annual interest expense journal entry. Note that the interest paid on a note during the year equals the face value of the note times the stated rate (i.e., coupon rate) of the note.**

Interest expense	37,500	
	Cash	37,500

- d. Prepare the journal entry that Rite Aid will make when these notes mature in 2017.

Notes payable	500,000	
	Cash	500,000

- RR. Consider the 9.375% senior notes due December 2015. Assume that interest is paid annually.

- a. What is the face value (or principal) of these notes? What is the carrying value (net book value) of these notes at February 27, 2010? Why do the two values differ?

The face value of these notes is \$410,000. The carrying value as of February 27, 2010 is \$405,951. This amount differs because the note was issued at a discount. This was likely caused by Rite Aide's stated interest rate offered on the note being less than the market rate at the time of issuance. Because of the discount's relation to interest, it will be amortized over the life of the note, meaning the carrying and face value will be equal upon the note's maturity.

- b. How much interest did Rite Aid pay on these notes during the fiscal 2009?

Rite Aid paid \$38,438 in interest on these notes in 2009.

- c. **Determine the total amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010. Note that there is a cash and a noncash portion to interest expense on these notes because they were issued at a discount. The noncash portion of interest expense is the amortization of the discount during the year (that is, the amount by which the discount decreased during the year).**

The total interest expense for the year ended February 27, 2010 was \$39,143. Of this amount, \$38,438 was cash and \$705 was the amortization of the discount.

- d. **Prepare the journal entry to record interest expense on these notes for fiscal 2009. Consider both the cash and discount (noncash) portions of the interest expense from part *iii* above.**

Interest expense	39,143	
Discount on notes payable	705	
Cash	38,438	

- e. **Compute the total rate of interest recorded for fiscal 2009 on these notes.**

The total rate of interest on these notes was 9.659%. This represents the market rate of interest on similar notes at the time of interest. This rate is greater than the 9.375% stated rate, which explains the discount on the note.

SS. Consider the 9.75% notes due June 2016. Assume that Rite Aid issued these notes on June 30, 2009 and that the company pays interest on June 30th of each year

- a. According to note 11, the proceeds of the notes at the time of issue were 98.2% of the face value of the notes. Prepare the journal entry that Rite Aid must have made when these notes were issued.**

Cash	402,620	
Discount on notes payable	7,380	
Notes payable		410,000

- b. At what effective annual rate of interest were these notes issued?**

These notes were issued at a 10.121% annual effective interest rate.

- c. Assume that Rite Aid uses the effective interest rate method to account for this debt. Use the table that follows to prepare an amortization schedule for these notes. Use the last column to verify that each year's interest expense reflects the same interest *rate* even though the *expense* changes**

Date	Cash Pmt	Interest Exp	Disc Amort	CV	Effective Rate
6/30/09	-	-	-	402,620.00	
6/30/10	39,975.00	40,749.98	774.98	403,394.98	$40,749.98/402,620.00 = .10121$
6/30/11	39,975.00	40,828.41	853.41	404,248.39	$40,828.41/403,394.98 = .10121$
6/30/12	39,975.00	40,914.79	939.79	405,188.18	$40,914.79/404,248.39 = .10121$
6/30/13	39,975.00	41,009.91	1,034.91	406,223.08	$41,009.91/405,188.18 = .10121$
6/30/14	39,975.00	41,114.65	1,139.65	407,362.73	$41,114.65/406,223.08 = .10121$
6/30/15	39,975.00	41,230.00	1,255.00	408,617.73	$41,230.00/407,362.73 = .10121$
6/30/16	39,975.00	41,357.02	1,382.27	410,000.00	$41,357.02/408,617.73 = .10121$

- d. Based on the above information, prepare the journal entry that Rite Aid would have recorded February 27, 2010, to accrue interest expense on these notes.

Interest expense	27,167	
Discount on notes payable		517
Interest payable		26,650

- e. Based on your answer to part iv., what would be the net book value of the notes at February 27, 2010?

The book value would be \$403,137.

CASE 8: STATE STREET CORPORATION

SUMMARY:

This case provided the 2012 financial statements of State Street Corporation and asked several questions about the financial statements and the information found in them. State Street is a financial services company and many of the questions revolved around the company's accounting practices related to buying and selling securities. In particular, the case examined the differences in accounting for both debt and equity securities based on management's intent for the investment.

In completing this case, I gained a better understanding of the accounting differences in accounting principles related to trading, available-for-sale, and held-to-maturity investments. This case forced me to consider how important it is for management to properly classify its investments so that information about the performance of those investments can be relayed to users of financial statements in the most relevant and accurate manner. This became especially evident given the company being studied in this case was in the financial services industry. In addition, this case emphasized the difference that the classification of an investment has on the reporting of a change in fair value of a given investment. In this sense, the case showed me the importance of examining both a company's income statement and its statement of comprehensive income in evaluating a company's investment performance.

TT. Consider trading securities. Note that financial institutions such as State Street typically call these securities “Trading account assets.”

a. In general, what are trading securities?

Trading securities are a category of securities that a company intends to hold for a short period of time (usually three months or less) and then sell for a profit. Trading securities can include both debt and equity securities and are recorded on the balance as a current asset at fair value. Any changes in fair value in trading securities are recorded on the income statement as a gain or loss.

b. How would a company record \$1 of dividends or interest received from trading securities?

Cash	1
Dividend/interest revenue	1

c. If the market value of trading securities increased by \$1 during the reporting period, what journal entry would the company record?

Fair value adjustment	1
Unrealized holding gain-income	1

UU. Consider securities available-for-sale. Note that State Street calls these, “Investment securities available for sale.”

a. In general, what are securities available-for-sale?

Securities are classified as available-for-sale when they do not meet the classifications for either the trading or held-to-maturity classifications. Available-for-sale securities can be debt or equity securities and are recorded on the balance sheet at fair value. Any changes in fair value in available-for-sale securities are recorded as a part of other comprehensive income.

- b. How would a company record \$1 of dividends or interest received from securities available-for-sale?**

Cash	1
Dividend/interest revenue	1

- c. If the market value of securities available-for-sale increased by \$1 during the reporting period, what journal entry would the company record?**

Fair value adjustment	1
Unrealized holding gain-equity	1

VV. Consider securities held-to-maturity. Note that State Street calls these, “Investment securities held to maturity.”

- a. In general, what are these securities? Why are equity securities never classified as held-to-maturity?**

Held-to-maturity securities are securities that management intends to hold until maturity. Only debt securities can be classified as held-to-maturity because equity securities do not have a maturity date. Held-to-maturity securities are reported on the balance sheet at amortized cost

and changes in fair value are reported only in the notes to financial statements.

- b. If the market value of securities held-to-maturity increased by \$1 during the reporting period, what journal entry would the company record?

None

WW. Consider the “Trading account assets” on State Street’s balance sheet.

- a. What is the balance in this account on December 31, 2012? What is the market value of these securities on that date?

The balance at December 31, 2012 is \$637 million. This represents the market value of these securities on that date.

- b. Assume that the 2012 unadjusted trial balance for trading account assets was \$552 million. What adjusting journal entry would State Street make to adjust this account to market value? Ignore any income tax effects for this part.

Fair value adjustment	85
Unrealized holding gain-income	85

XX. Consider the balance sheet account “Investment securities held to maturity” and the related disclosures in Note 4.

- a. What is the 2012 year-end balance in this account?

\$11,379 million

- b. What is the market value of State Street's investment securities held to maturity?**

\$11,661 million

- c. What is the amortized cost of these securities? What does "amortized cost" represent? How does amortized cost compare to the original cost of the securities?**

The amortized cost is \$11,379 million. This represents the cost of the securities plus or minus the recognition of any premium or discount over the term of the security to return its book value to its face value by maturity date. The amortized cost is less than the market value.

- d. What does the difference between the market value and the amortized cost represent? What does the difference suggest about how the average market rate of interest on held-to-maturity securities has changed since the purchase of the securities held by State Street?**

The difference represents an increase in the value of State Street's held-to-maturity securities. This difference suggests that the average market interest rate for similar securities has decreased since State Street purchased its securities. This decrease would make the higher rates on State Street's securities more attractive, resulting in an increase in market value.

YY. Consider the balance sheet account “Investment securities available for sale” and the related disclosures in Note 4.

- a. What is the 2012 year-end balance in this account? What does this balance represent?**

The balance is \$109,682 million. This represents the fair value of the securities.

- b. What is the amount of net *unrealized* gains or losses on the available-for-sale securities held by State Street at December 31, 2012? Be sure to note whether the amount is a net gain or loss.**

There was a net gain of \$1,119 million.

- c. What was the amount of net *realized* gains (losses) from sales of available-for-sale securities for 2012? How would this amount impact State Street’s statements of income and cash flows for 2012?**

The net realized gain was \$55 million. This amount would be reported as an increase to net income in the “other gains and losses” section of the income statement. It would be reported as a deduction from net income on the statement of cash flows to arrive at net cash inflow or outflow.

ZZ. State Street’s statement of cash flow for 2012 (not included) shows the following line items in the “Investing Activities” section relating to available-for-sale securities (in millions):

Proceeds from sales of available-for-sale securities \$ 5,399

Purchases of available-for-sale securities \$60,812

- i. **Show the journal entry State Street made to record the purchase of available-for-sale securities for 2012.**

Investments in AFS securities	60,812	
Cash		60,812

- ii. **Show the journal entry State Street made to record the sale of available-for-sale securities for 2012. Note 13 (not included) reports that the available-for-sale securities sold during 2012 had “*unrealized pre-tax gains of \$67 million as of December 31, 2011.*” Hint: be sure to remove the current book-value of these securities in your entry.**

Cash	5,399	
Unrealized holding gain	67	
Gain on sale of AFS securities		55
Investments in AFS securities		5411

- iii. **Use the information in part g. ii to determine the original cost of the available-for-sale securities sold during 2012.**

This amount is \$5,344 million. It is computed by taking the proceeds from the sale, adding the unrealized gain on the securities, and then subtracting the realized gain.

CASE 9: ZAGG INC.

SUMMARY:

This case provided the 2012 financial statements of ZAGG, Inc. and asked several questions about the financial statements and the information found in them. ZAGG is a consumer electronics company and many of the questions revolved around the company's accounting practices related to deferred income taxes. In particular, the case examined the effects of temporary and permanent differences between book and taxable income on a company's income tax expense.

In completing this case, I gained a better understanding of the accounting principles related to deferred taxes. This case forced me to consider the potential causes of deferred taxes, such as various temporary and permanent differences in book and taxable income, and the effect that those deferred taxes have on a company's income statement and balance sheet. The case required consulting the FASB Accounting Standards Codification, which gave me the chance to gain a better understanding of the FASB's intentions with regard to accounting for income taxes. In addition, the case delved into the concept of valuing deferred tax accounts on the basis of expected realizable value. This aspect gave me an insight into the challenges managers face when trying to estimate future earnings in order to value potential future tax benefits. Overall, I felt this case furthered my ability to analyze a company's financial statements in terms of understanding its total income tax obligations.

AAA. Describe what is meant by the term book income? Which number in ZAGG's statement of operation captures this notion for fiscal 2012? Describe how a company's book income differs from its taxable income.

The term book income refers to the pre-tax financial income that a company reports on its income statement. This income is determined on an accrual basis in accordance with generally accepted accounting principles (GAAP). Taxable income refers to the amount of income on which a company is obligated to pay income taxes as determined by state and federal governments. The main difference between book income and taxable income is that taxable income is determined on a cash basis as opposed to an accrual basis, which can result in many temporary differences between the two. For example, a company may accrue a warranty expense in one year that will reduce its book income; however, this expense will not affect the company's taxable income until the expense is paid in cash at some point in the future. These types of differences are referred to as temporary differences because they will reverse over time. On the other hand, there are some items that result in permanent differences between book income and taxable income. For example, a fine levied by a governmental regulatory agency will rightfully be deducted from book income but will generally not be permitted to be deducted from taxable income, as doing so would mitigate the intended effect of the fine.

BBB. In your own words, define the following terms:

a. Permanent tax differences (also provide an example)

A permanent tax difference is a difference between book income and taxable income that will not reverse over time. One example would be

a interest earned from a municipal bond. This revenue will be included in book income, but can usually be omitted from taxable income.

b. Temporary tax difference (also provide an example)

A temporary tax difference refers to a difference between book income and taxable income that will reverse over time. For example, a company may receive cash for a subscription service in advance of performing the service. This cash will be included in taxable income since that amount is calculated on a cash basis but not in book income since that amount is determined on an accrual basis. However, over time this difference will reverse as the company recognizes the cash received as revenue as the company meets its service obligations.

c. Statutory tax rate

The statutory tax rate refers to the tax rate that is imposed by law.

d. Effective tax rate

The effective tax rate refers to the rate of tax that a company actually pays. It is computed by dividing the company's income tax expense by its net income. This rate often differs from the statutory rate due to many companies having to pay taxes in multiple jurisdictions that may not have the same statutory rate or any permanent or temporary difference in book and taxable income.

CCC. Explain in general terms why a company reports deferred income taxes as part of their total income tax expense. Why don't companies simply report their current tax bill as their income tax expense?

Companies report deferred income taxes as a part of their total tax expense in order to give users of financial statements an accurate depiction of the total tax liability the company has incurred during the period being reported. If companies simply reported their current tax liability as their income tax expense, they would be misleading users by failing to disclose those transactions that were recognized during the reporting period that will have tax effects in the future. The FASB addressed this issue in ASC 740-10-10-1, which specifies that companies must disclose both “the amount of taxes payable or refundable for the current year” and “the deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity’s financial statements or tax returns.” This view is consistent with the FASB’s expense recognition principle, which states that expenses should be recognized and reported when incurred. Because an income tax is an expense related to a company’s earnings, or the net amount of its revenues and expenses, the full tax effect of a company’s revenues and expenses should be disclosed in the year the revenue or expense is incurred, even if that effect will not be realized until some time in the future. This manner of reporting provides a more accurate measure of net income, as provisions are made to expense both the income taxes payable in the current year and an estimation of the net future tax effect of transactions recognized in the current year’s financial statements but not in the company’s computation of taxable income. This method yields an income tax expense that is a more fair and complete representation of the total tax effect of the company’s earnings in a given year as compared to reporting only current income taxes. Furthermore, reporting deferred taxes separately results in a more accurate balance sheet presentation, as future tax obligations are rightfully reported as liabilities and future tax deductions are reported as assets. By disclosing these tax-related assets and liabilities, users of financial statements can more accurately assess the amount and probability of future earnings by having access to the future tax effects of past events.

DDD.Explain what deferred income tax assets and deferred income tax liabilities represent. Give an example of a situation that would give rise to each of these items on the balance sheet.

A deferred tax asset represents an asset resulting from income taxes payable being greater than the income taxes paid. This may result if a company receives cash for a service to be performed in the future. The company will pay taxes on the cash received in advance of recognizing the revenue in accordance with tax law and GAAP. This additional tax paid on the cash received creates an asset for the company in that it has now already paid taxes on a revenue that will be recognized in the future. This represents a future economic benefit and is therefore recorded on the balance sheet as an asset.

A deferred tax liability represents a liability resulting from taxes paid to the government being less than income taxes payable. A deferred tax liability would arise if a company uses the straight-line method for depreciation of an asset on its books but uses an accelerated depreciation method for tax purposes. The accelerated method will decrease the company's taxable income, as it will result in a greater depreciation expense being deducted from taxable income initially. However, taking this larger deduction on the front end will result in the company being liable for a greater income tax expense in later years of the asset's useful life. The reason being in future years, the company's book income will exceed its taxable income. This creates a future economic obligation that the company must fulfill and is therefore recorded as a liability.

EEE. Explain what a deferred income tax valuation allowance is and when it should be recorded.

When a company records a deferred tax asset, the company is assuming that it will generate enough future income to utilize the asset for the amount for which it has been recorded. Because some deferred tax assets, such as a net operating loss carryforward, are subject to expiration, this is not always a guarantee. When it becomes more than likely (greater than 50%) that a company will not generate enough future income to fully offset its deferred tax asset, the company should establish a deferred income tax valuation allowance to reduce the carrying value of the asset to its expected realizable value. This is done by debiting income tax expense to recognize the additional expense that was previously not recorded at the time the asset was recognized and crediting the valuation account to reduce the carrying value of the deferred asset.

FFF. Consider the information disclosed in Note 8 – Income Taxes to answer the following questions:

- a. Using information in the first table in Note 8, show the journal entry that ZAGG recorded for the income tax provision in fiscal 2012?**

Income tax expense	9,393
Deferred tax asset, net	8,293
Income taxes payable	17,686

- b. Using the information in the third table in Note 8, decompose the amount of “net deferred income taxes” recorded in income tax journal entry in part *f. i.* into its deferred income tax asset and deferred income tax liability components.

Income tax expense	9,393
Deferred tax asset	8,002
Deferred tax liability	291
Income taxes payable	17,686

- c. The second table in Note 8 provides a reconciliation of income taxes computed using the federal statutory rate (35%) to income taxes computed using ZAGG’s effective tax rate. Calculate ZAGG’s 2012 effective tax rate using the information provided in their income statement. What accounts for the difference between the statutory rate and ZAGG’s effective tax rate?

ZAGG’s effective tax rate is 39.30%. This difference is the result of a combination of state income taxes, non-deductible expenses, a domestic production deduction, and a change in valuation allowance.

- d. **According to the third table in Note 8 – Income Taxes, ZAGG had a net deferred income tax asset balance of \$13,508,000 at December 31, 2012. Explain where this amount appears on ZAGG’s balance sheet.**

This amount is the sum of the current deferred tax assets (6,912,000) and the noncurrent deferred tax assets (6,596,000) on the balance sheet.